

Please type a plus sign (+) inside this box ☐

UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. BP3089
First Inventor Ba-Zhong Shen, Ph.D.
Title LDPC (LOW DENSITY PARITY CHECK) CODED MODULATION SYMBOL DECODING
Express Mail Label No. EV 082608838 US

2239 U.S. PTO 660526 09/23/03

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents

ADDRESS TO:

Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

1. ☒ Fee Transmittal Form (e.g. PTO/SB/17)
(submit an original and a duplicate for fee processing)
 2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
 3. ☒ Specification [Total Pages (preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R&D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
 4. ☒ Drawing(s) (35 U.S.C. 113) [Total Pages - 5. Oath or Declaration [Total Pages - a. ☒ Newly executed (original or copy)
Copy from a prior application (37 CFR 1.63 (d))
 - b. ☐ (for continuation/divisional with Box 18 completed)
 - i. ☐ DELETION OF INVENTOR(S)
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - a. ☐ Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☒ Assignment Papers (cover sheet & documents(s))
10. ☒ 37 CFR 3.73(b) Statement (when there is an assignee) ☒ Power of Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☐ Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: LOA, PTO-2038 Forms for \$1014 and \$40.....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: _____
Prior application information: Examiner: _____ Group Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label or ☒ Correspondence address below
Insert customer no. or attach bar code label here

| | | | | | |
|---------|------------------------|-----------|----------------|----------|----------------|
| Name | Shayne X. Short, Ph.D. | | | | |
| Address | P.O. Box 160727 | | | | |
| City | Austin | State | TX | Zip Code | 78716-0727 |
| Country | USA | Telephone | (512) 825-1145 | FAX | (512) 394-0054 |

| | | | |
|-------------------|---|-------------------------------|-----------|
| Name (Print/Type) | Shayne X. Short, Ph.D. | Registration No. (Atty/Agent) | 45,105 |
| Signature |  | Date | 9/23/2003 |

Please type a plus sign (+) inside this box ☐

PTO/SB/17 (11_00)
Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$) \$1054.00

Complete if Known

| | |
|----------------------|----------------------|
| Application Number | |
| Filing Date | |
| First Named Inventor | Ba-Zhong Shen, Ph.D. |
| Examiner Name | |
| Group Art Unit | |
| Atty Docket No. | BP3089 |

METHOD OF PAYMENT

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number

Deposit Account Name

☐ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☒ **Payment Enclosed:**

☐ Check ☒ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

| Fee Description | Fee Paid |
|------------------------|--------------------|
| Utility filing fee | 750.00 |
| Design filing fee | |
| Plant filing fee | |
| Reissue filing fee | |
| Provisional filing fee | |
| SUBTOTAL(1) | (\$) 750.00 |

2. EXTRA CLAIM FEES

Fee From Below

| | Extra Claims | Fee Paid |
|--------------------|--------------------|----------|
| Total Claims | 30 -20** 10 X 18 = | 180.00 |
| Independent Claims | 4 -3** 1 X 84 = | 84.00 |
| Multiple Dependent | | |

Fee Description

Claims in excess of 20
Independent claims in excess of 3
**Reissue independent claims over original patent
**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 264.00

FEE CALCULATION (continued)

3.. ADDITIONAL FEES

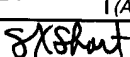
Fee Description

Surcharge-late filing fee or oath
Surcharge- late provisional filing fee or or cover sheet
Non-english specifications
For filing a request for ex parte reexamination
Requesting publication of SIR prior to Examiner action
Requesting publication of SIR after Examiner action
Extension for reply within first month
Extension for reply within second month
Extension for reply within third month
Extension for reply within fourth month
Extension for reply within fifth month
Notice of Appeal
Filing a brief in support of appeal
Request for oral hearing
Petition to institute a public use proceeding
Petition to revive - unavoidable
Petition to revive unintentional
Utility Issue Fee (or reissue)
Design Issue Fee
Plant Issue Fee
Petitions to the Commissioner
Processing fee under 37 CFR 1.17(q)
Submissions of Information Disclosure Stmt
Recording each patent assignment per property (times number of properties) \$40.00
Filing a submission after final rejection (37 CFR 1.129(a))
For each additional invention to be examined (37 CFR 1.129(b))
Request for Continued Examination (RCE)
Request for expedited Examination of design application
Other fee (specify)
Reduced by Basic Filing Fee Paid

SUBTOTAL (3) \$40.00

SUBMITTED BY

Complete (if applicable)

| | | | | | |
|-------------------|---|-----------------------------------|-----------|-----------|----------------|
| Name (Print Type) | Shayne X. Short, Ph.D. | Registration No. (Attorney Agent) | 45,105 | Telephone | (512) 825-1145 |
| Signature |  | Date | 9/23/2003 | | |

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

Certificate Under 37 CFR 3.73(b)

Applicants: Ba-Zhong Shen, Ph.D. Hau Thien Tran Dr. Kelly Brian Cameron

Entitled: LDPC (LOW DENSITY PARITY CHECK) CODED MODULATION SYMBOL DECODING

Application No.

Filing Date:

Broadcom Corporation

(Name of Assignee)

a, California Corporation

(Type of Assignee)

states that it is :

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either :

- A. ☒ An Assignment for the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title for the inventor(s) of the patent application/patent identified above to the current assignee as shown below:

1. From _____ To: _____
The document was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
2. From _____ To: _____
The document was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
3. From _____ To: _____
The document was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8]

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

Date: 9-23-2003

Name: Dee Henderson

Title: Manager, Intellectual Property Portfolio

Signature: 